## STUDIES IN THE EUPATORIEAE (ASTERACEAE). XL.

## THE GENUS, UROLEPIS.

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The name <u>Urolepis</u> is here raised to generic rank to accomodate the single species, <u>U</u>. <u>hecatantha</u>. The most distinctive feature of the genus is the greatly enlarged pubescent receptacle. Nearly as distinctive are the stylar appendages with long densely imbricate papillae. The carpopodium with its enlarged thinwalled cells and swollen upper part is also useful as a character, along with the enlarged blunt tipped apical cells of the pappus setae. The combination of characters given is more than adequate to set this genus apart from others.

The genus, Urolepis, is not easily placed among others in the Eupatorieae. The glabrous unenlarged style base and smooth corolla lobes might be Critonioid but the style branches and highly annulated anther collars would be unusual for that group. The species has been placed in Hebeclinium which is a Critonioid genus, but the latter has a smaller receptacle, cells of the anther collars without annular thickenings, corolla lobes with hairs on the back, style branches smooth, and pappus setae completely different. The style branches of Urolepis are like those of Ayapana and the numerous flowers on a hairy receptacle are reminiscent of the Ayapana related Polyanthina. Nevertheless, these Camploclinioid genera have enlarged style bases and very distinct carpopodia and do not seem closely related. The closest relatives of Urolepis are undoubtedly among the as yet unassigned species of southern Brazil and adjacent areas. A species placed in section Urolepis by Baker, Eupatorium trichobasis has a prominent pubescent receptacle, annulated anther collars, and the same type of enlarged blunt apical cells on the pappus setae. The achene is also rather similar but the carpopodium much less distinct. This latter species is very different, however, in the papillose inner surfaces and margins of the corolla lobes and the shorter more erect papillae of the style branches, and the relationships seem distinctly Gyptoid. It hardly seems necessary to indicate that the genus Eupatorium is only remotely related being distinguished by hairs on the base of the style among other things. It is only the crudest kind of taxonomy that Urolepis has resided under the name Eupatorium for so long.

Urolepis (A.P.Decandolle) R.M.King H.Robinson, new status. <u>Hebeclinium</u> section <u>Urolepis</u> A.P.Decandolle, Prodr. 5: 136. 1836. Eupatorium section Urolepis [ A.P.Decandolle] Baker in Mart. Fl. Bras. 6(2): 364. 1876.

Coarse herbs or subshrubs, sparingly branched. Leaves opposite, distinctly long petioled, blades broadly deltoid, dentate or denticulate. Inflorescence a corymbose panicle. Involucre of ca 50 long appendaged phyllaries in 3-4 series; receptacles subglobose, densely short pubescent; 100-150 flowers per head; corollas narrowly tubular, 5-lobed, outer surface of cor-olla glabrous below, lobes slightly longer than wide with a few short stalked glands externally; stomates absent; extreme tips of lobes papillose; inner surface of corolla glabrous; cells of corollas slender with very sinuous walls. Anther collar slender, composed of mostly rectangular cells with numerous transverse thickenings. Anther appendage rather large with large cells. Style base without enlarged node, glabrous. Stylar appendage narrow throughout, with very long slender imbricated papillae. Achenes prismatic, 4-5 ribbed, with occasional short stalked glands, carpopodia very distinct, tapering, composed of elongate mostly thin walled cells, upper cells of carpopodium and lower cells of ribs much enlarged. Pappus of ca 20 scabrous setae, enlarged near the tips, apical cells very blunt.

Type species: <u>Hebeclinium hecatanthum</u> A.P.Decandolle.

Urolepis hecatantha (A.P.Decandolle) R.M.King & H.Robinson, comb. nov. <u>Hebeclinium hecatanthum</u> A.P.Decandolle, Prodr. 5: 136. 1836. <u>Hebeclinium urolepis</u> A.P.Decandolle, Prodr. 5: 136.

1836. Argentina, Bolivia, Brazil, Paraguay.

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